

bracts narrow, glandular; pedicels 1-2 cm. long, glabrous; stamens about 20, with white anthers: pome pyriform up to the time of ripening, when fully ripe obovoid to spherical, but often drying pyriform, a little more than 1 cm. in diameter and a little longer than thick, dull red with green blotches.

The tree flowers about the middle of May, and the fruit ripens in early October.

According to Mr. Canby's observations, the plant is not uncommon in the vicinity of Tannersville.

N. L. BRITTON.

REVIEWS

The Desert Botanical Laboratory of the Carnegie Institution*

This volume contains the report of the advisory board, consisting of Mr. F. V. Coville and Dr. D. T. MacDougal, which was appointed to investigate the selection of a site for the Carnegie Desert Laboratory in the arid regions of the West. The report will be of unusual interest to botanists, not only because it deals with one of the most important botanical departures in this country and promises results of the highest biological importance, but also because the authors have given sufficient knowledge of the flora and conditions prevailing in these arid belts to reveal the wealth of material afforded for physiological and geographical study. The majority of botanists have not had the opportunity of visiting the areas covered by the report and to such and to people in general the diversity of climate, topography, mechanical, chemical and physical conditions which obtain in these desert districts will come with something of surprise. The information concerning the areas and distribution of these arid regions in the Chihuahua and the Sonora-Nevada desert belts, which occupy more than a million square miles of plateaus and plains east and west of the main Cordilleran ranges together with data upon the meteorology and other conditions controlling plant-life in these areas is an important supplement to the meager and often misleading current information upon this subject.

* Carnegie Institution of Washington, Publication, No. 6. Pp. i-vi, 1-58. *Pl.* 1-39 + *f.* 1-4. "N 1903." [Issued] 1904.]

The committee in performing its work visited all the more important arid districts in the west, noting the character of the vegetation, and physical and soil conditions. This led them first into the siliceous sand hills of Chihuahua, Mexico, and thence to the drifting alkaline sand fields of the Tularosa Desert of New Mexico, which cover an area of about 10 by 40 square miles. From the extensive arid country about Tucson, Arizona, with its rich flora and varied conditions, they proceeded into the province of Sonora, Mexico, giving an interesting account of the vegetation and the remarkable associations of forms occurring at Torres and especially at Guaymas. Continuing westward, detours were made at several points in the Colorado Desert, revealing the extreme diverse topographical and soil conditions which vary from mountains and hills to salt and alkali flats and sand-swept plains. The exploration ended with a journey through the Mohave Desert, concerning which Mr. Coville has given a very comprehensive report in the Botany of the Death Valley Expedition, and a trip to the Grand Canyon of the Colorado. The selection, as a result of this survey of the field, of Tucson, Arizona, as a site for the laboratory cannot be criticized. It is situated on one of the great transcontinental lines, rendering it easily accessible and the city of Tucson will furnish a convenient and satisfactory base of supplies. In addition to this the large arid belt in this region presents a typical desert flora and with such a diversity of conditions that it is exceptionally rich in woody and annual species. It is to be hoped that the laboratory may not only furnish facilities for the investigation of plant life in the country adjacent to Tucson, but that it may have as one of its functions the equipment of expeditions to the numerous promising districts noted in the report.

The value of the report has been greatly enhanced by the introduction of thirty-nine illustrations of desert views. It is safe to say that these are the most remarkable scenes of desert plant-life that have ever been published. They bring very vividly before us the character of the vegetation and the atmosphere of the region.

The Desert Botanical Laboratory of the Carnegie Institution is to be congratulated on having so favorable an introduction to the public.

CARLTON C. CURTIS.